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Minutes

Board of Building Regulations and Standards Fire Prevention Fire Protection (FPFP) Advisory Committee Meeting Rooms, Department of Fire Services, Stow, MA April 29, 2014, 9:00 a.m.

1. Roll Call

a. Robert Carasitti Chair (RC) √ present g. Chief Gary McCarraher (GM) absent √ present b. Dave LeBlanc V-Chair (DL) absent h. Boston Fire Commissioner c. Walter Adams (WA) present √ absent Paul Donga for BFD d. Don Contois (DC) √ present absent e. Harold Cutler (HL) present √ absent j. Kurt Ruchala (KR) Rob Anderson (or designee) √ present absent k. Louise Vera (LV) Mike Guigli for RA

present √ absent √ present absent

i. State Fire Marshal (or designee) √ present absent Jake Nunnemacher for SFM

present √ absent √ present absent Jeff Putnam for LV

For the purpose of "minutes" reference, votes are represented in a 3 part format, "In Favor"—"Opposed"—"Abstaining". For example, a 7-0-1 vote indicates 7 In Favor, 0 Opposed and 1 Abstaining

The chair opened the meeting at 9:05 am. After roll call, having 7 members present, a quorum was declared by the chair.

2. Minutes of the March 2014 FPFP meeting were reviewed and approved.

2nd: PD Motion: DL Vote: Unanimous (7-0-0).

- 3. The FPFP discussed next steps for official interpretation of smoke detection requirements for common areas of multi-unit residential buildings. MG volunteered to draft the interpretation/FAQ with assistance from other FPFP members including DC, DL and BC.
- The FPFP discussed further the issue of wireless smoke detection/fire alarm requirements per questions posed by 4. DFS (copied below). This was a continuation of the March meeting discussion.

There are a number of new wireless fire protection products that have been recently introduced on the market. We would like to know, if any of these are acceptable to meet the Mass. Amended 780 CMR - Chapter 9 and/or 780 CMR - Chapter 51.

Several new wireless smoke alarms, and/or wireless household fire alarm systems that have been introduced. These devices include:

- a. Hardwired smoke alarms with battery back-up with wireless interconnection (BRK).
- Battery smoke alarms with wireless programmable interconnection. (First Alert OneLink, Kidde Wireless)
- c. One hardwired smoke alarm 'brain' with battery back-up that interfaces/interconnects existing hardwired smoke alarms with wireless programmable smoke alarms (First Alert OneLink).
- d. Wireless smoke alarms with programmable interconnection that are monitored by wireless smart device(s). (Crossfire)
- e. Wireless fire alarm systems with programmable interconnection that are monitored by wireless smart device(s). (First Alert Iris, Nest, SimpliSafe)
- f. Wireless home automation systems with fire protection with programmable interconnection that are monitored by wireless smart device(s). (First Alert Iris, Nest, SimpliSafe)

780 CMR 907.2.11.4 requires that smoke alarms must receive their primary power from the building wiring – 780 CMR R314 has no requirement other than meeting the 2007 NFPA 72.

2. Please confirm that the Massachusetts State Building Code has a different referenced fire alarm standard than the Massachusetts Residential Code. The Building Code references the 2010 NFPA 72 in the Mass amended 2009 IBC Chapter 44 – Referenced Standards. The Residential Code references the 2007 NFPA 72 in the Mass. Amended 2009 IRC Chapter 44 – Referenced Standards.

We ask that this, please forward to the FPFP sub-committee for further review and any report back on acceptability under the code.

The discussion flowed around the criteria for smoke detection based on the code in effect at the time of construction as well as criteria for alterations of older buildings. Depending on the Edition of 780 CMR in effect, the primary power for all single and multiple station smoke detection may be required to be from AC power (at least from the 4th Edition to the present, this would have been the case).

The discussion next flowed to system type smoke detection where the primary unit is powered from AC and then satellite/slave detectors are battery operated but monitored by the primary unit (whether a system control panel or a specific master device). The discussion then circled to "required" versus "voluntary" devices.

A motion was made that FPFP state the intent of the current new construction provisions is that all "required" single and multiple station smoke detectors are to have their primary power to be AC power.

Motion: JN 2nd: DL Vote: Unanimous (7-0-0).

While not stated via motion and vote, the FPFP members also acknowledged that the wireless technology needs to be NFPA 72 listed.

5. FPFP continued review of March 11 version of BBRS white paper on the cost and effectiveness of fire protection systems in 3 to 6 unit residential buildings.

There was extensive discussion regarding the white paper. Areas of concern included:

- The potential for the white paper to be misconstrued as policy,
- The lack of distinction on the types of 3-6 unit buildings to be considered (for example, the fire performance and impact on horizontally adjacent townhomes can be significantly different than that of vertically stacked dwelling units)
- The lack of discussion on the effectiveness and benefits of sprinklers,
- The over-emphasis on costs without the detail breakdown of the costs,
- The suggestion that the paper reflects a shift in "behavioral norm" with society's attitude towards life safety, and
- The lack of statistical comparison of sprinklered versus unsprinklered residential buildings in terms of life and property loss cost considerations.

After discussion, the committee voted on five motions:

1) The FPFP does not feel the draft white paper adequately addresses the effectiveness and benefits of sprinklers.

Motion: DL 2nd: DC Vote: 6-0-1 Abstaining (MG)

2) The FPFP recommends the Board (BBRS) consider cost reduction strategies for the installation of systems rather than the elimination of sprinklers. Examples included, a) reduction of system requirements for 3-6 unit buildings exclusively used for residential purposes by allowing reduced demand systems and lessoning monitoring criteria and b) working with the legislature and appropriate water authorities to reduce or otherwise offset the large expense of water supply connection fees.

Motion: DC 2nd: DL Vote: 6-0-1 Abstaining (MG)

3) The FPFP recommends the Board consider the cost benefits of the "tradeoffs" in building construction that are allowed as a result of sprinkler protection. Cost comparisons are necessary for fully sprinklered versus non-sprinklered residential buildings.

Motion: DL 2nd: JN Vote: 6-0-1 Abstaining (MG)

4) The FPFP recommends the Board consider the modern construction materials & methods as well as the additional fire event risks they present. Specifically, the issues of increase lightweight construction and the use of plastics for energy code compliance must be addressed by the white paper.

Motion: DL 2nd: DC Vote: 6-0-1 Abstaining (MG)

5) The FPFP requests hard copies of all references in the white paper to allow proper cross referencing review. To this end, the FPFP requests staff create a single folder that contains the white paper, cited references and other data refinement documents as a public record tool.

Motion: DL 2nd: JN Vote: 6-0-1 Abstaining (MG)

6. Other matters not reasonably anticipated 2 business days in advance of meeting. NONE.

7. Approval to adjourn the meeting: Motion: DL 2nd: MG Vote: 7-0-0 Unanimous